Section 2
Crash Participants, Injured Persons and Fatalities, 2000

TABLES

FIGURES

Injured Persons and Fatalities 1970 - 2000

The trends in injuries and fatalities for the past thirty years are shown in Table 2.01. During this time period nearly 700,000 people have been injured and almost 10,000 people have been killed in a crash.

In 2000, the injured person rate per 100 million vehicle miles traveled (MVMT) was 133.6. This was a 2% decrease from the 1999 rate of 137.0. The lowest fatality rate occurred in 1998 and 1999 at 1.6. There was a 6% increase in this rate to 1.7 in 2000.

Table

Year	Million Vehicle Miles Traveled (MVMT)	Injuries	Fatalities	Injury Rate per 100 MVMT	Fatality Rate per 100 MVMT
1970	6,108	17,076	335	279.6	5.5
1971	6,544	18,073	337	276.2	5.1
1972	6,969	18,261	382	262.0	5.5
1973	7,274	18,415	361	253.2	5.0
1974	7,457	16,268	228	218.2	3.1
1975	7,942	17,762	274	223.6	3.5
1976	8,420	18,315	254	217.5	3.0
1977	9,054	19,728	360	217.9	4.0
1978	9,826	21,029	376	214.0	3.8
1979	9,811	20,798	328	212.0	3.3
1980	10,645	17,828	335	167.5	3.1
1981	10,733	18,090	364	168.5	3.4
1982	10,947	17,538	296	160.2	2.7
1983	11,228	18,910	283	168.4	2.5
1984	11,642	20,487	315	176.0	2.7
1985	12,035	21,346	303	177.4	2.5
1986	12,253	21,350	312	174.2	2.5
1987	12,679	19,237	297	151.7	2.3
1988	13,263	19,066	297	143.8	2.2
1989	13,915	19,843	303	142.6	2.2
1990	14,646	20,608	272	140.7	1.9
1991	15,390	19,540	271	127.0	1.8
1992	16,263	22,490	269	138.3	1.7
1993	17,055	25,763	303	151.1	1.8
1994	18,080	28,436	343	157.3	1.9
1995	18,786	28,343	325	150.9	1.7
1996	19,433	30,711	328	158.0	1.7
1997	20,408	31,238	366	153.1	1.8
1998	21,237	30,232	350	142.4	1.6
1999	21,867	29,959	360	137.0	1.6
2000	22,517	30,086	373	133.6	1.7
Total	404,427	676,826	9,900	167.4	2.4

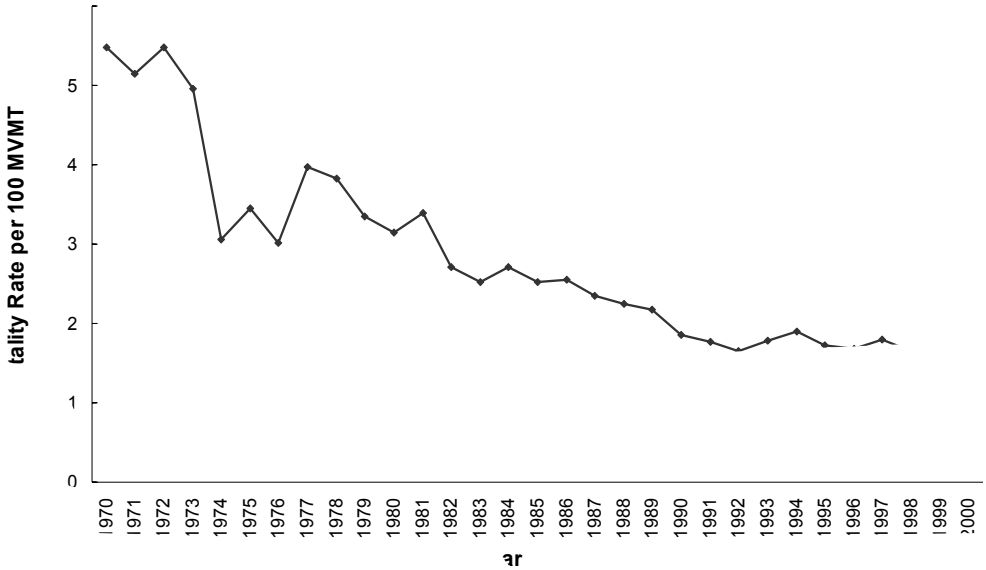
Injured Persons and Fatalities 1970 - 2000

Figure 2.01 reflects the trends in rates of persons injured in crashes per 100 million vehicle miles traveled (MVMT) from 1970 to 2000. The injury rates were highest in the early 1970s.

Figure 2.01 Crash Injured Person Rates per Million Vehicle Miles Traveled, Utah 1970-2000

Figure 2.02 shows the trends in the rate of persons killed in crashes per 100 million vehicle miles traveled. The rate has markedly decreased from 5.5 persons killed per 100 MVMT in 1970 to 1.7 persons killed per 100 MVMT in 2000. The biggest decrease in fatalities occurred after the implementation of a 55 MPH speed limit in 1973.

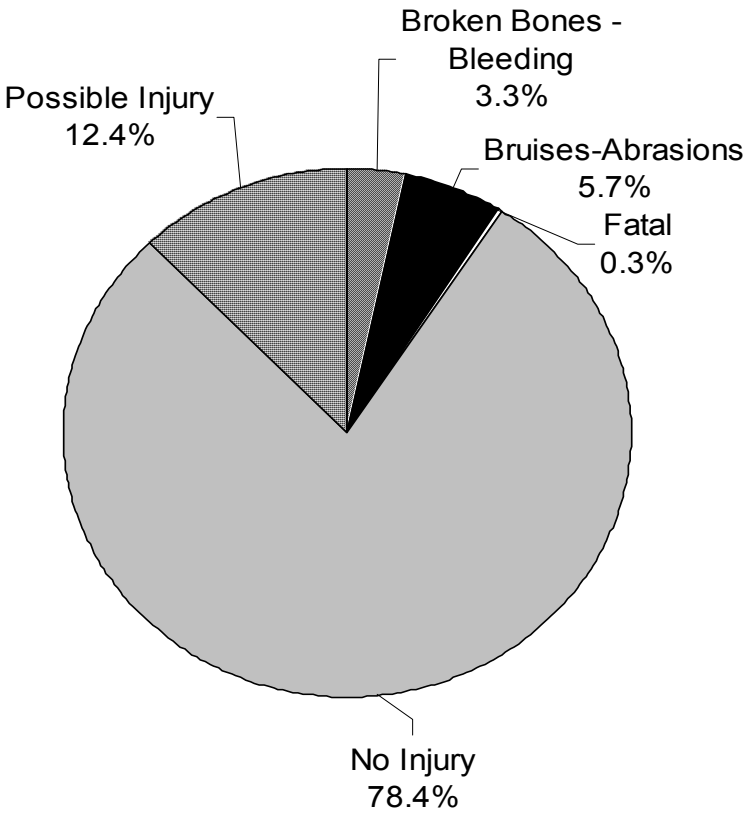
Figure 2.02 Crash Fatality Rates per Million Vehicle Miles Traveled, Utah 1970-2000



Crash Injury Severity

The majority (78.4%) of total crash participants did not sustain any injury. Fatal crashes represented 0.6% of total crashes, yet a fatal injury was sustained by 0.3% of total crash participants. These facts indicate that individuals in the same crash have different injury experiences. Many factors influence injury patterns including seatbelt use, seat position, and vehicle safety equipment.

Figure 2.03 Severity of Injuries as Reported by Police, Utah 2000 (n=140,777)



Crash Participants, Injured Persons and Fatalities by County

Figure 2.04 depicts the number of injuries and fatalities for each county. For rates of crash participants, injured persons and fatalities see Table 2.02.

Figure 2.04 Injuries and Fatalities by County, Utah 2000

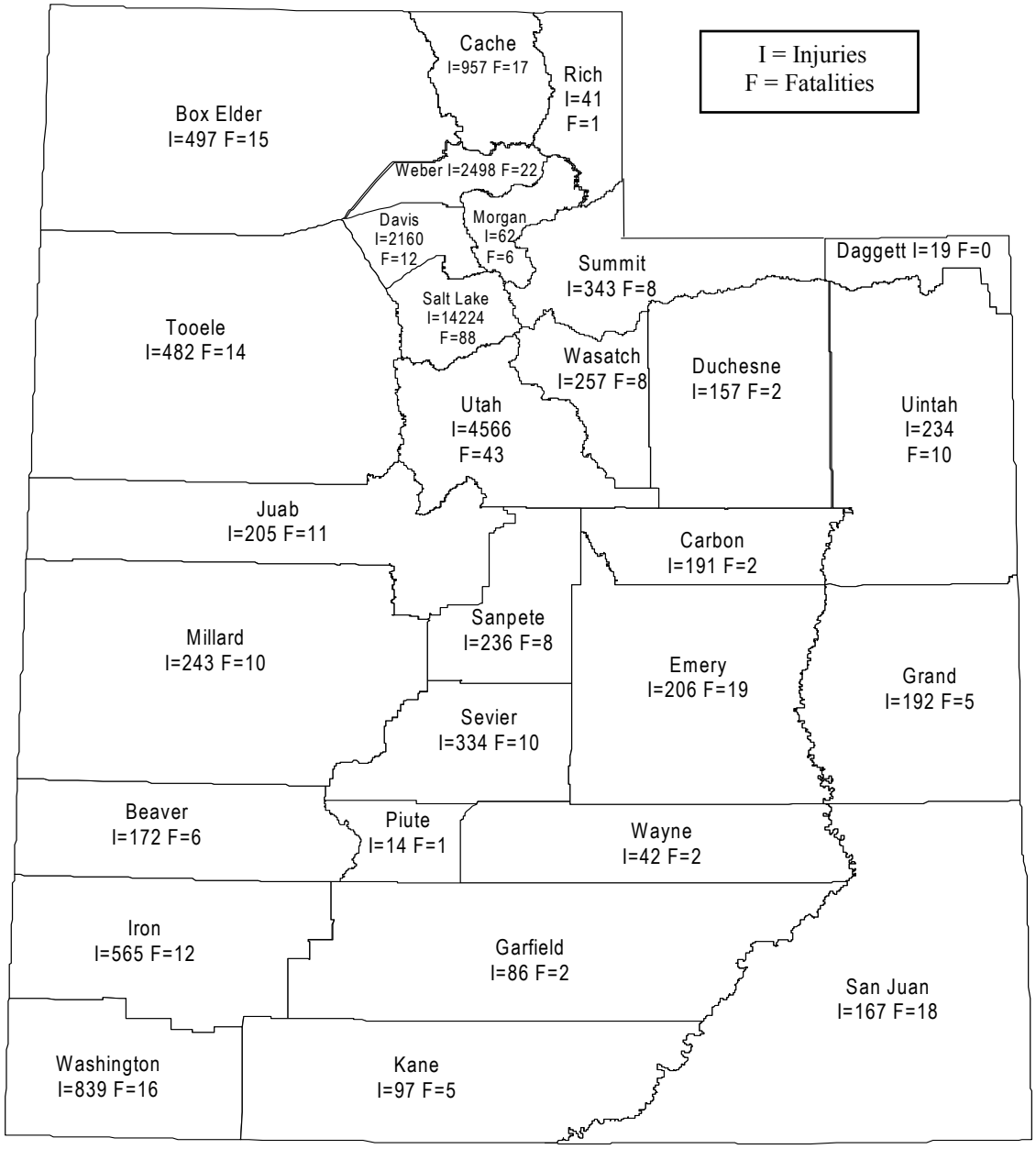


Table 2.02 shows the rates of crash participants, injured persons and fatalities for each county. Two different rates are given in Table 2.02; one based on miles traveled in the county and another on the population of the county. The leading counties for crash participants based on miles traveled were Salt Lake, Weber, and Utah. The leading for injured persons were also Salt Lake, Weber, and Utah. While the leading three for fatalities were San Juan, Emery, and Morgan.

Table 2.02 Crash Participants, Injured Persons and Fatalities by County, Utah 2000

	Crash Participants			Injured Persons			Crash Fatalities		
County	#	Rate per MVMT	Rate Per 10,000 Population	#	Rate per 10 MVMT	Rate Per 10,000 Population	#	Rate per 100 MVMT	Rate Per 10,000 Population
Beaver	588	2.8	847.8	172	8.1	248.0	6	2.8	8.7
Box Elder	2,118	2.3	496.4	497	5.4	116.5	15	1.6	3.5
Cache	5,365	6.8	574.3	957	12.1	102.4	17	2.1	1.8
Carbon	968	2.8	426.5	191	5.5	84.1	2	0.6	0.9
Daggett	102	4.0	1,193.0	19	7.5	222.2	0	0.0	0.0
Davis	13,075	6.3	554.9	2,160	10.3	91.7	12	0.6	0.5
Duchesne	655	3.4	455.2	157	8.1	109.1	2	1.0	1.4
Emery	660	1.9	588.7	206	5.8	183.7	19	5.4	16.9
Garfield	355	2.6	747.7	86	6.4	181.1	2	1.5	4.2
Grand	569	2.1	517.8	192	6.9	174.7	5	1.8	4.6
Iron	2,273	4.0	661.3	565	10.0	164.4	12	2.1	3.5
Juab	705	2.0	861.0	205	5.9	250.4	11	3.2	13.4
Kane	400	3.2	534.5	97	7.9	129.6	5	4.0	6.7
Millard	934	2.3	723.5	243	5.9	188.2	10	2.4	7.7
Morgan	309	2.6	442.4	62	5.1	88.8	6	5.0	8.6
Piute	77	2.6	461.1	14	4.7	83.8	1	3.4	6.0
Rich	159	3.6	846.2	41	9.2	218.2	1	2.2	5.3
Salt Lake	64,118	8.8	735.0	14,224	19.4	163.0	88	1.2	1.0
San Juan	696	2.5	514.2	167	6.0	123.4	18	6.4	13.3
Sanpete	857	3.7	383.2	236	10.3	105.5	8	3.5	3.6
Sevier	1,281	3.3	652.9	334	8.6	170.2	10	2.6	5.1
Summit	1,849	3.0	672.1	343	5.5	124.7	8	1.3	2.9
Tooele	1,856	2.8	526.1	482	7.2	136.6	14	2.1	4.0
Uintah	1,155	3.9	463.1	234	7.9	93.8	10	3.4	4.0
Utah	22,106	7.3	639.1	4,566	15.1	132.0	43	1.4	1.2
Wasatch	1,119	4.5	776.2	257	10.3	178.3	8	3.2	5.5
Washington	4,461	5.0	517.4	839	9.3	97.3	16	1.8	1.9
Wayne	168	4.1	641.0	42	10.3	160.2	2	4.9	7.6
Weber	11,799	7.8	618.7	2,498	16.5	131.0	22	1.5	1.3
Grand Total	140,777	6.3	648.0	30,086	13.4	138.5	373	1.7	1.7

Characteristics of Crash Participants,

Table 2.03 contains the injury levels by participant placement in the crash. Pedestrians involved in a crash were at the greatest risk for a fatal injury. In fact, pedestrians were 18 times more likely than other crash participants to sustain a fatal injury. For occupants, the back seat provided more protection than front seat passengers against fatal injury. Front seat passengers were 1.2 times more likely than back seat passengers to sustain a fatal injury.

Table 2.03 Injury Severity by Participants Placement in the Crash, Utah 2000

Participant Placement	Crash Participants		Injured Persons		Crash Fatalities	
	#	%	#	%	#	%
Driver	96,150	68.3%	18,936	62.9%	200	51.6%
Front Seat Passenger	24,966	17.7%	6,363	21.1%	80	24.0%
Back Seat Passenger	17,687	12.6%	3,232	10.7%	46	9.8%
Cargo Area	267	0.2%	61	0.2%	2	0.8%
Pedestrian	785	0.6%	708	2.4%	33	10.7%
Bicyclist	706	0.5%	635	2.1%	9	0.8%
Other	216	0.2%	151	0.5%	3	2.2%
Grand Total	140,777	100.0%	30,086	100.0%	373	100.0%

The gender breakdown of crash participants is found in Table 2.04. Over half of the crash participants were male (54.6%). While males sustained fatal injuries at a slightly higher percentage than females, female crash participants were more likely to sustain an injury than male crash participants.

Table 2.04 Gender of Crash Participants, Injured Persons and Fatalities, Utah 2000

Gender	Crash Participants		Injured Persons		Crash Fatalities	
	#	%	#	%	#	%
Female	61,751	43.9%	15,882	52.8%	138	41.5%
Male	76,850	54.6%	14,074	46.8%	235	58.5%
Missing	2,176	1.5%	130	0.4%	0	0.0%
Grand Total	140,777	100.0%	30,086	100.0%	373	100.0%

Figure 2.05 shows the age of persons involved in crashes. The largest proportion of crash participants (36.9%) were aged 15 to 24 years. Individuals over the age of 65 years represented a small proportion of crash participants. However, in the event of a crash, individuals of this age group were 3 times more likely than all other age groups to sustain a fatal injury.

Figure 2.05 Age of Crash Participants, Injured Persons and Fatalities, Utah 2000

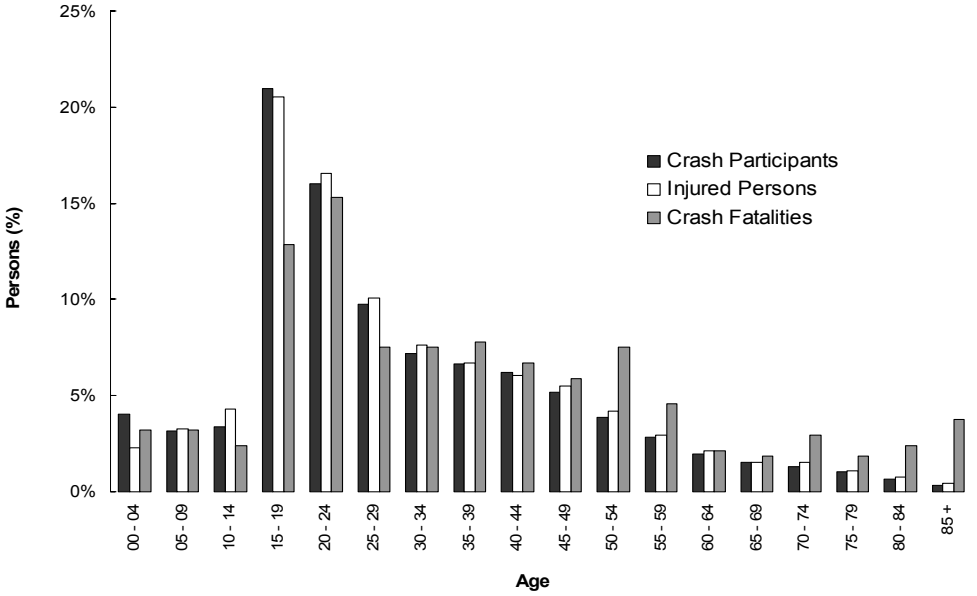


Table 2.05 Age of Crash Participants, Injured Persons and Fatalities, Utah 2000

	Crash Participants		Injured Persons		Crash Fatalities	
Age	#	%	#	%	#	%
00 - 04	5,712	4.1%	695	2.3%	12	3.2%
05 - 09	4,461	3.2%	988	3.3%	12	3.2%
10 - 14	4,790	3.4%	1,296	4.3%	9	2.4%
15 - 19	29,483	20.9%	6,174	20.5%	48	12.9%
20 - 24	22,575	16.0%	4,983	16.6%	57	15.3%
25 - 29	13,693	9.7%	3,035	10.1%	28	7.5%
30 - 34	10,121	7.2%	2,299	7.6%	28	7.5%
35 - 39	9,333	6.6%	2,017	6.7%	29	7.8%
40 - 44	8,724	6.2%	1,821	6.1%	25	6.7%
45 - 49	7,279	5.2%	1,663	5.5%	22	5.9%
50 - 54	5,427	3.9%	1,268	4.2%	28	7.5%
55 - 59	3,985	2.8%	879	2.9%	17	4.6%
60 - 64	2,787	2.0%	643	2.1%	8	2.1%
65 - 69	2,119	1.5%	462	1.5%	7	1.9%
70 - 74	1,869	1.3%	463	1.5%	11	2.9%
75 - 79	1,478	1.0%	334	1.1%	7	1.9%
80 - 84	924	0.7%	224	0.7%	9	2.4%
85 +	480	0.3%	125	0.4%	14	3.8%
Missing	5,537	3.9%	717	2.4%	2	0.5%
Grand Total	140,777	100.0%	30,086	100.0%	373	100.0%

There were 373 crash-related fatalities during 2000. Figure 2.06 shows that over one-quarter of the fatalities (28%) occurred among those aged 15 to 24 years. The largest number of fatalities for males occurred in the 20 to 24 year old age group, compared to the 15 to 19 year old group for females.

Figure 2.06 Age and Gender of Fatalities, Utah 2000